

AMENDMENTS TO THE DRAWINGS

Figure 1 has been amended to remove the reference number 20 as indicated by the Examiner. In Figure 5, reference number 30 has been amended to reference number 32 to be consistent with the written specification and Figure 4. Figure 12 has been amended to remove the reference numbers 14, 20 and 22 as indicated by the Examiner.

REMARKS

This paper is in response to the Office Action mailed July 22, 2005. By this paper, claims 1-2 are amended, claims 3-12 are cancelled, and claims 13-17 are added. Accordingly, claims 1-2 and 13-17 are pending upon entry of this paper.

Response to Objection to the Drawings

The drawings are objected to because of various informalities with the reference numbers. Figure 1 has been amended to remove the reference number 20 as indicated by the Examiner. In Figure 5, reference number 30 has been amended to reference number 32 to be consistent with the written specification and Figure 4. Figure 12 has been amended to remove the reference numbers 14, 20 and 22 as indicated by the Examiner. Applicants submit that no new matter has been added by these amendments.

Amendments to the Specification

Applicants submit herewith an amendment to the specification to correct various informalities and improve the readability of the specification. Applicants submit that no new matter was added by these amendments.

In paragraph 6, the Examiner indicates that the specification provides a confusing description of the vacuum actuator. Applicants point out that, as indicated on Figure 18 and described beginning on page 12, line 19, the vacuum actuator 20 can push or pull the actuator rod 66 in opposing directions as indicated by the arrows indicated by reference numbers 29 and 31. The actuator rod 66 then causes the sensor detector 190 to pivot about the radial axis of the aperture 196. Thus, vacuum actuator 20 does not operate the actuator rod 66 in one embodiment and the sensor detector 190 in a second embodiment as mistakenly indicated by the Examiner. Rather, the vacuum actuator 20 operates both the actuator rod 66 and the sensor detector 190 in all embodiments.

Response to Rejection of Claims 1-2

Claim 1 in the application stands rejected as being anticipated by Jow et al. (U.S. Patent No. 4,496,793). Claim 1 is directed to an off the road vehicle having a frame, an

engine operatively supported by said frame and at least a first ground engaging drive wheel operatively supported by said frame. A drive system is operatively connected to said engine and including a transmission having a forward condition, a reverse condition and a neutral condition for driving the ground engaging wheel. The transmission has an actuator rod attached thereto for use in shifting the transmission between the forward, reverse and neutral conditions. The vehicle also includes a transmission control system. More particularly, the transmission control system of claim 1, as amended, comprises, *inter alia*:

- (1) an operator actuated activating means;
- (2) a shift control mechanism that selectively receives an input from said activating means and selectively sends a corresponding output;
- (3) a vacuum actuator operatively connected to said shift control mechanism and operatively connected to said actuating rod, said vacuum actuator receiving said output from said shift control mechanism and adjusting said actuating rod to shift the transmission between said forward and reverse directions; and
- (4) a sensing mechanism, said sensing mechanism comprising a sensor detector and a sensor, the sensor detector being connected to said actuator rod so as to move with the actuator rod when shifting the transmission between the forward, reverse and neutral conditions, wherein the sensor detects when the sensor detector is in a neutral condition and when the sensor detector is not in the neutral condition.

Claim 1, as amended, is novel and patentable over the references of record, and particularly over Jow et al., because the cited art does not show or suggest a vehicle having a transmission control system with a sensing mechanism, said sensing mechanism comprising a sensor detector and a sensor, the sensor detector being connected to said actuator rod so move with the actuator rod when shifting the transmission between the forward, reverse and neutral conditions, wherein the sensor detects when the sensor detector is in a neutral condition and when the sensor detector is not in the neutral condition as required by claim 1.

Jow et al. disclose an automatic gear shifting device for operating a gear-shift type transmission in conjunction with a disc type clutch of an automobile. The gear shifting device includes a control unit; a trigger switch operable by the accelerator pedal of the automobile; detectors for detecting engine speed, automobile road speed, transmission position (gear position) and clutch position and for delivering control signals to the control unit. The gear shifting device also has actuators operable by vacuum produced in the intake manifold of the engine or by a pressurized air or fluid to operate the clutch and the transmission, the actuators each having a solenoid valve through which the vacuum or the pressurized air is applied to the actuator. The control unit, upon receiving and processing the control signals, is adapted to deliver operation signals to the solenoid valves to allow vacuum or pressurized air or fluid to be applied to the actuators in a pre-programmed sequential order to operate automatically the transmission and clutch to adjust to the speed and load condition of the automobile.

Jow et al. provide no teaching or suggestion for a sensing mechanism comprising a sensor detector and a sensor, the sensor detector being connected to said actuator rod so move with the actuator rod when shifting the transmission between the forward, reverse and neutral conditions, wherein the sensor detects when the sensor detector is in a neutral condition and when the sensor detector is not in the neutral condition as required by claim 1.

Accordingly, claim 1 is not anticipated by or made obvious by the cited reference and favorable consideration of claim 1 is respectfully requested. Claim 2, depending directly from claim 1 is submitted as patentable over the cited references for at least the same reasons.

New Claims

Applicants have added new claims directed to subjected matter that Applicants believe is patentable over the cited art. Prompt allowance of the new claims is respectfully requested.

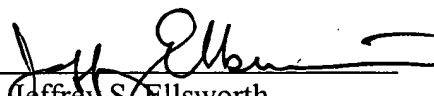
Conclusion

In view of the amendments and remarks made herein, Applicant submits that the claims presented herein are patentably distinguishable from the art applied and prompt allowance of the application is respectfully requested.

Should the Examiner determine that anything else is desirable to place this application in even better form for allowance, the Examiner is respectfully requested to contact the undersigned by telephone.

Respectfully Submitted,
WEGMAN, HESSLER & VANDERBURG

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